**4.4c The second part of the Fundamental Theorem of Calculus**

1. Explain in your own words what the second part of the fundamental theorem states.

**Find *F’(x)*:**

2. 3. 4.

5. 6. 7.

**Don’t forget the chain rule when the upper bound is not just an “x”**

8. 9. 10.

The total cost of purchasing and maintaining a piece of equipment for (y) years is

1. Perform the integration (using the Fundamental theorem from a couple days ago) to write this model for cost in terms of y only.
2. Find the cost after the first, fifth, and tenth years.
3. What trend or pattern do you see happening? You might use words like limit, etc…